



# ASHARE CONNECT

Software Design Document

Version <1.0>

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**Revision History**

Date	Version	Description	People
<28/Nov/16>	<1.0>	First Draft	Steve Prescott
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Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

## Table of Contents

### Introduction

Purpose.....	Page 3
Scope.....	Page 3
Overview.....	Page 4
Glossary.....	Page 5
Use Cases.....	Page 6
Use Case Diagrams.....	Page 7
Use Cases.....	Page 8-17
Client/Server Model.....	Page 18-23
Class Diagram.....	Page

Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

## Software Design Document

### 1. Introduction

#### 1.1 Purpose

The purpose of this document is to explain the functionality of the AShare Connect video conferencing software.

#### 1.2 Scope

This document covers the use case functionality of the AShare Connect view conferencing software for both host clients, including use case models, sequence diagrams, collaboration models, object behavior models, and other supporting requirement information.

Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

### 1.5 Overview

The Software Design Document is divided into 11 sections with various subsections. The sections of the Software Design Document are:

- 1 Introduction
- 2 Glossary
- 3 Use Cases
- 4 Design Overview

Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

## 2. Glossary:

Client- Client and Host

Host- A person that is give the lecture has chat, sharing desktop and audio control.

Participant-A person that is in the meeting listen to the lecture and can chat.

Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

### 3. Use Cases

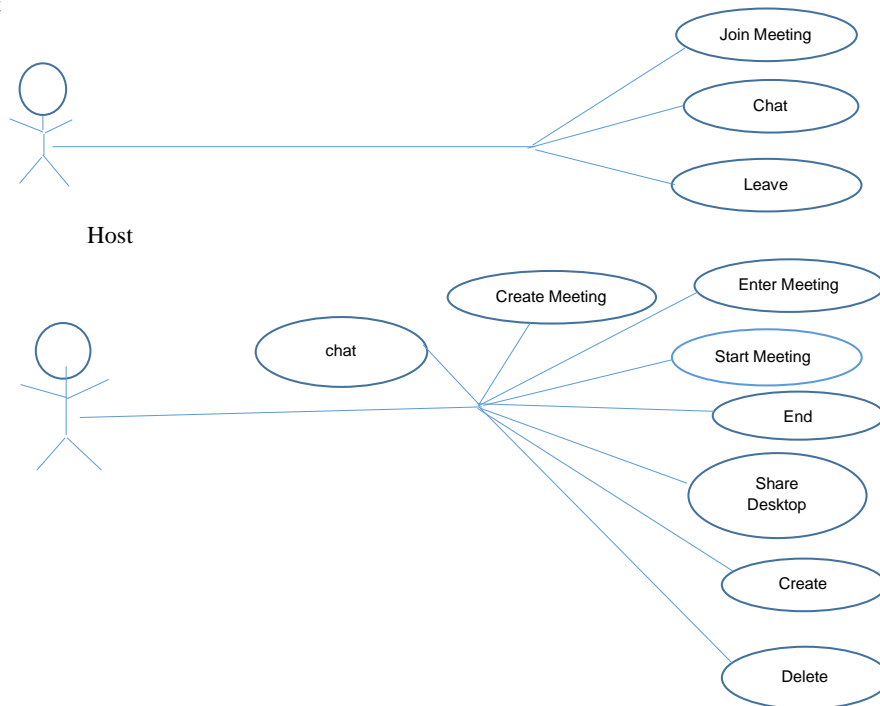
#### 3.1 Use Case List

1. Join meeting
2. Chat
3. Leave meeting
4. Create Meeting
5. Entering the meeting
6. Start Meeting
7. End Meeting
8. Share Desktop
9. Create
10. Delete

Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

## 3.2 Use Case Diagrams

Client





Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

### 3.3 Use Cases

User Case Name: Join Meeting
Primary Actors: Client, Host
Brief Description: To enter room and place name in the in the chat box text area
Procedure: This is where the participant and the host can enter a room by a hyperlink. The host must enter their password to use the controls. Both type their names in the textbox. Client goes to the connection site. They sign in their name in the textbox provide. Push the enter button and enter the meeting area.
Expected Outcomes: Client can enter the room
Errors: Name is not on the list. Client enter the room more than once.

Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

User Case Name: Chat
Primary Actor: Host, Client
Brief Description: An area on the side of the meeting area where people can communicate with the host or each other during the meeting
Procedure: Host or Client type in the bottom textbox and click on the enter key.
Expected Outcomes: After the enter key is pushed the message goes to the textbox above so everyone can see it.
Errors: Once button pushed no message sent. During typing no letters are being type into the box.

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Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

User Case Name: Leave meeting
Primary Actor: Client
Brief Description: Once the client click on the exit button they leave the meeting.
Procedure: Click on the web page exit button.
Expected Outcomes: Once the client click on the exit button they leave the meeting.
Errors: Client is unable to leave the page.

Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

User Case Name: Create meeting
Primary Actor: Host
Brief Description: Process of creating a meeting for the participants.
Procedure: Log in as Administrator User. Create a public meeting and set it to private. Call Permissions: Add Host, Presenter, and Guest. Create a Url for the meeting room.
Expected Outcomes: The meeting is created properly. Client can enter. Client is sent to the right Url.
Errors: The meeting isn't created properly. Client can't enter. Client is sent to the wrong Url.

Commented [S2]:

Commented [S3]:

Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

User Case Name: Entering the meeting
Primary Actor: Host
Brief Description: Host enter their meeting
Procedure: From connect central click my meetings to open the desired meeting.  Click on the meeting Url that you received in your email.  Type the login username and password  Enter room or just type in Url and enter user name and password to enter room.
Expected Outcomes: After the user name and password was entered Host should be able to enter room.
Errors: After the user name and password was entered Host should be able to enter room.

Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

User Case Name: Start Meeting
Primary Actor: Host
Brief Description: Host starts the meeting
Procedure: Click on the start meeting button. Create an account or use existing account. Type Url, login and Password
Expected Outcomes: Meeting starts as predicted.
Errors: Url not correct, meeting doesn't start or password not accepted.

Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

User Case Name: End Meeting
Primary Actor: Host
Brief Description: Host end the meeting
Procedure: Click on the end meeting button to end the session.
Expected Outcomes: The session ends
Errors: Meeting doesn't end when button is clicked.

Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

User Case Name: Share Desktop
Primary Actor: Host
Brief Description: Share the Host desktop in a meeting
Procedure: Select screen resolution Star screen sharing button to begin Prepare desktop for session
Expected Outcomes: Screen is shared to the participants
Errors: Screen isn't shared



Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

User Case Name: Create
Actor: Host
Brief Description: Add new names to the meetings that can join.
Procedure: Adding Groups and Users can be done manually or import using a CVS file.
Expected Outcomes: New groups and users are added.
Errors: System won't add groups and users.

Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

User Case Name: Delete
Actor: Host
Brief Description: Delete new names to the meetings that can't join.
Procedure: Deleting Groups and Users can be done manually or import using a CVS file.
Expected Outcomes: New groups and users are deleted.
Errors: System won't add groups and users.

Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

## Design Overview 4.1

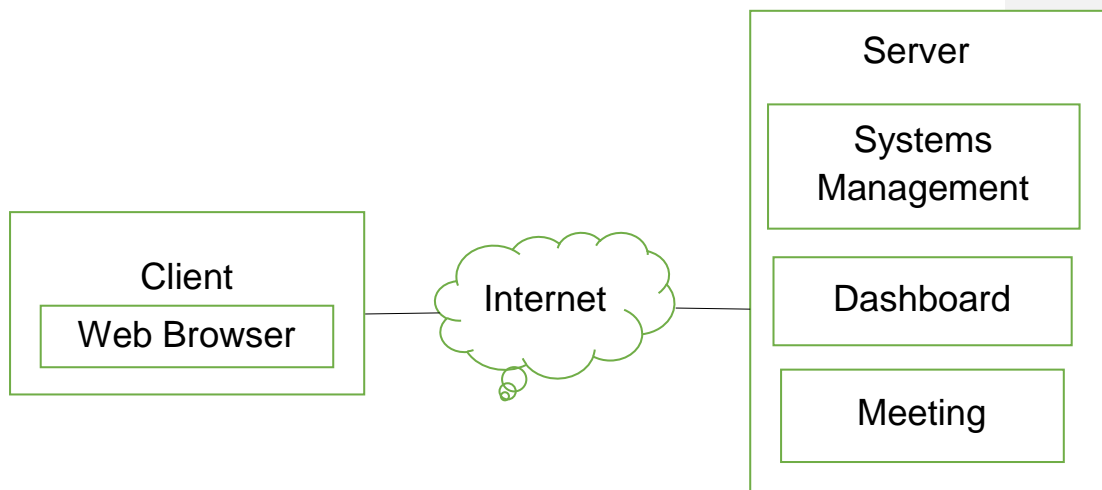
### Introduction

The Design Overview is section to introduce and give a brief overview of the design. The System Architecture is a way to give the overall view of a system and to place it into context with external systems. Design is based on the Client/Server Model. Design will have scalability. Design will be easy to upgrade.

### Architecture:

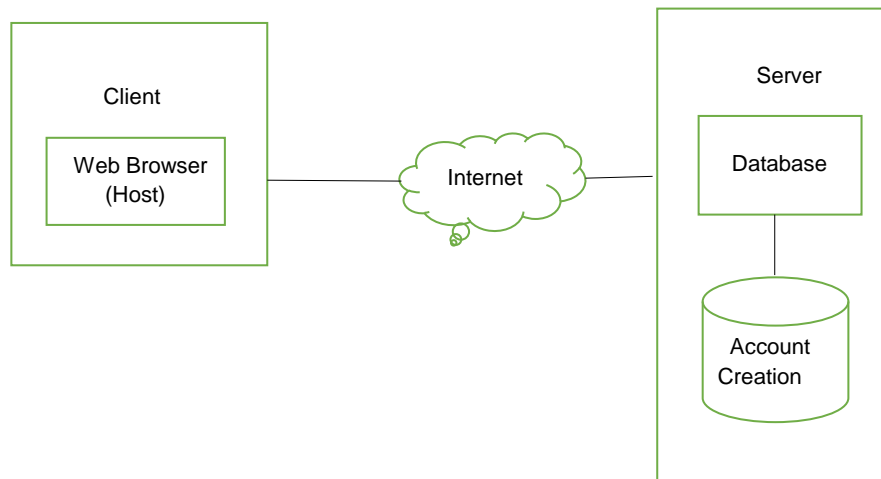
The architecture that we choose for this project was the Client/Server architecture because it meets our requirements very well. I came to this design because it would be easy to maintain while being reliable. Also, it would mean that we could hold large amounts of data which is required in video conferencing to handle video streaming so many people could be on at the same time.

## Client/Server Model Diagram



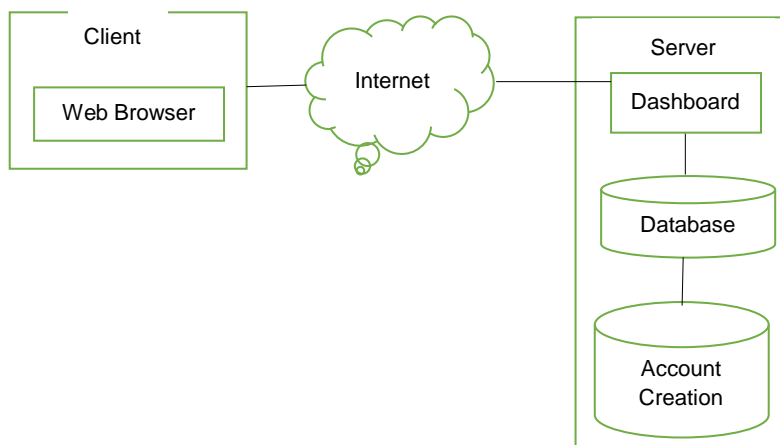
Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

## Password Account Diagram



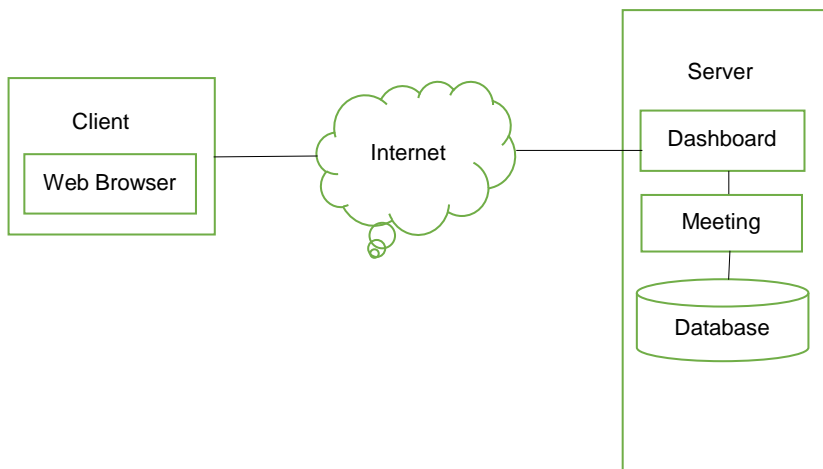
Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

## Add or Delete Name or Group Account



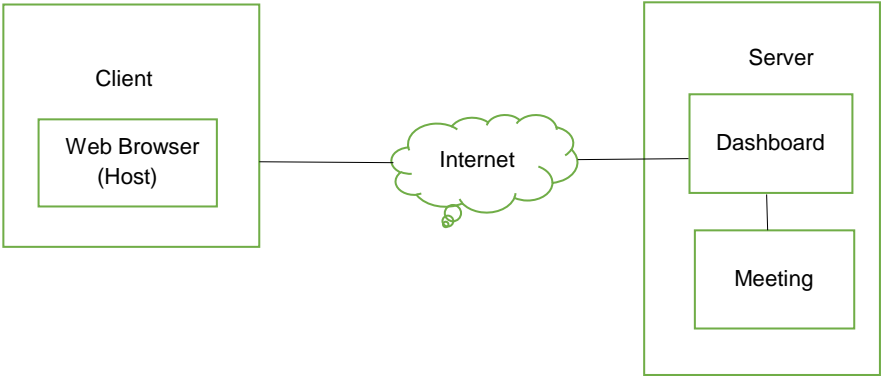
Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

## Meeting Account



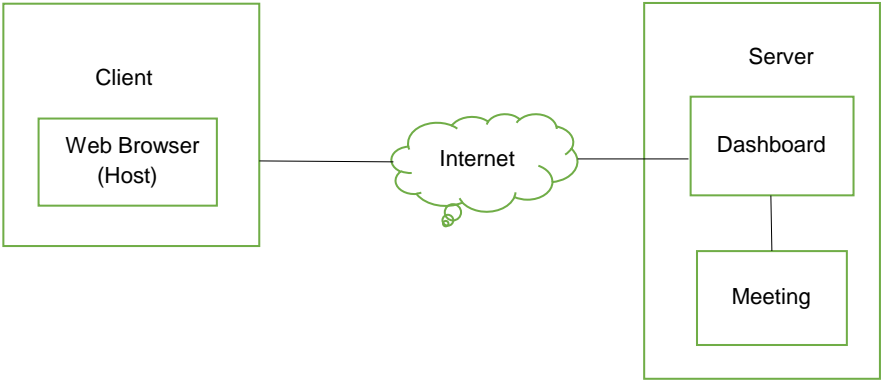
Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

# Share Desktop Diagram



Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

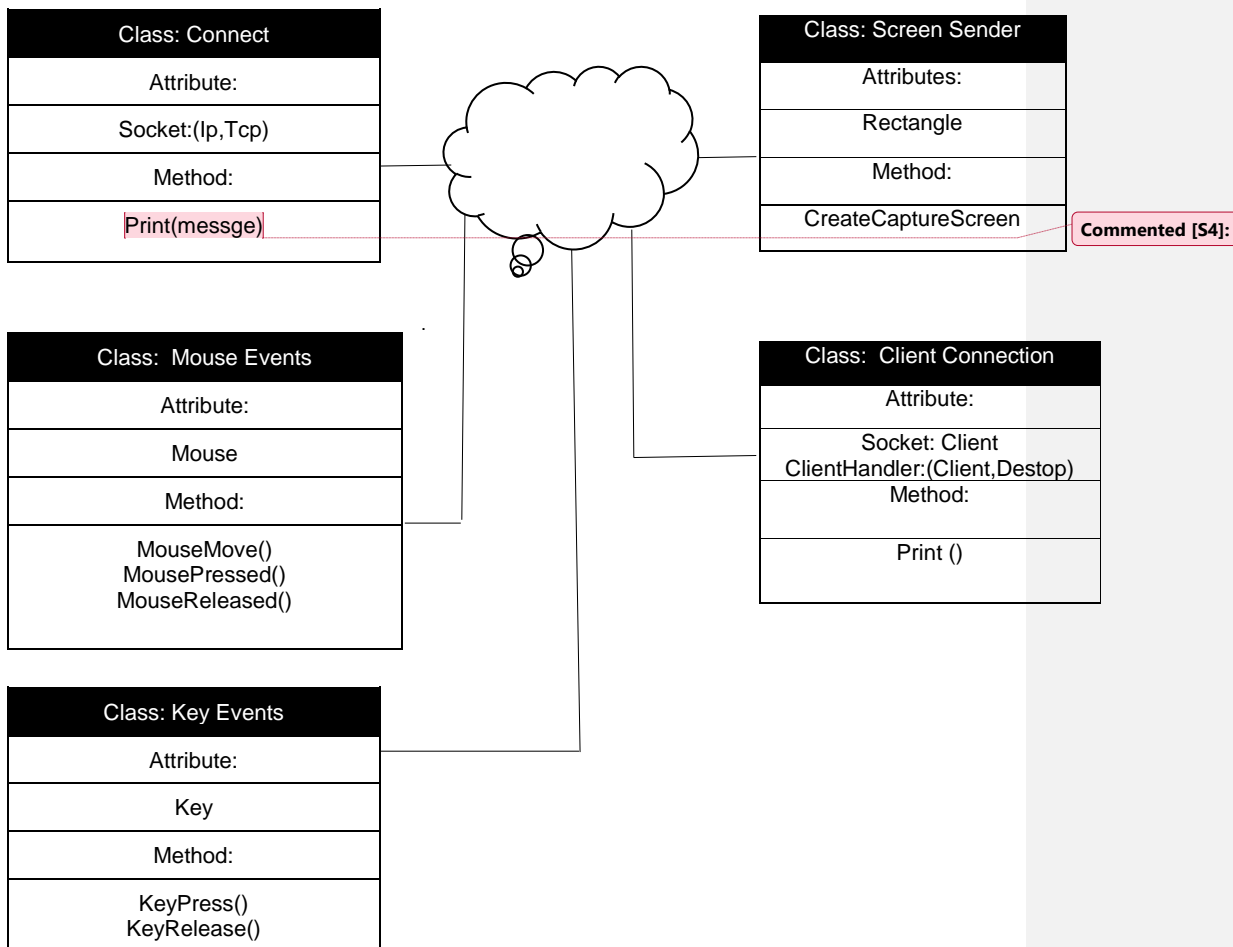
Audio Diagram





Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

## Remote Client Class Diagrams



Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

**Connection Class**– this class connects the Client to the Server and tells the Client that you are connected to the Server

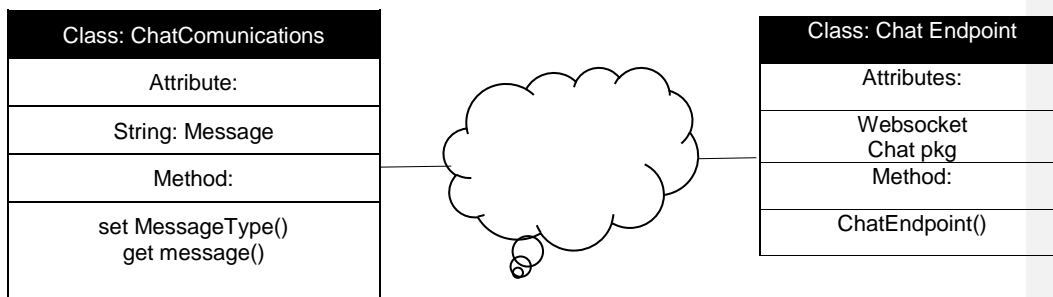
**Client Connection Class**-this class connects the Server to the Client and tell the Server that it is connected the Client.

**Mouse Events Class**- this class is used for the Host to be able to control mouse events.

**Key Events Class**- this class is used for the Host to be able to control key events.

**Screen Sender Class**- this class is used to capture the screen on the server and send it periodically to the user.

Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	



Dependency of DOW Index on External Factors	Version: <1.0>
Software Design	Date: <28/Nov/16>
First Draft	

**Chat Communication Class-** this is a class that allows the Server and client to chat back and forth.

**Chat Endpoint Class-** this class is used to disconnect from the chat room for both the Client and Server